NECHAYEV, G.A.; MAKASHEV, S.D.

Extending the raw material base. TSement 28 no.2:3-5 Mr-Ap '62. (MIRA 15:8)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Cement industries)

MAKASHEV, S. D.

ONUFRIYEV, I.A., red.; BARSKOV, I.M., red.; DMITRIYEV, A.D., red.; MAKASHEV, S.D., red.; PEVZNER, A.S., red. izd-va; GILENSON, P.G., tekhn. red.

[Abridged stenographic report of the All-Union Conference on Construction, Moscow, 1958] Sokrashchennyi stenograficheskii otchet. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 334 p. (MIRA 11:10)

1. Vsesoyuznoye soveshchaniye po stroitel'stvu. Moscow, 1958.
(Construction industry--Congresses)

MAKASHEV, M.Kh.; TKHORZHEVSKIY, O.A.

Aging of high-Q AT-cut quartz resonators. Izm.tekh. no.5:53-54 My '63. (MIRA 16:10)

MAKASHEV, K.K.; KAZACHENKO, I.V.

Distribution and excretion of radioactive calcium from the organism of healthy and lead-poisoned animals. Izv. Ak Kazakh. SSR. Ser. med. nauk no.1:50-55 '61. (MIRA 17:7)

MAKASHEV, K.K.; RAKHIMOVA, Z.P.

Distribution and discharge of P^{32} from the organism of healthy and lead-poisoned animals. Izv. AN Kazakh. SSR. Ser. med. nauk 11 no.2:44-49 '64. (MIRA 17:7)

MAKASHEV, K.K.;SHESTAKOVA, N.P.

Distribution and discharge of lead from the organism of healthy animals and those poisoned by lead. Trudy Inst. kraev. pat AN Kazakh. SSR 9:129-135'61. (MIRA 16:7)
(LEAD POISONING) (EXCRETION)

MAKASHEV, K.K.; AKHMEDOVA, A.S.

Effect of calcium and disodium salt of ethylenediaminetetraacetic acid and cortisone on the distribution of phosphorus and calcium in organs and tissues and their removal from the body in lead. Trudy Inst.kraev.pat. AN Kazakh.SSR 10:190-197 '62.
(MIRA 16:5)

(LEAD POISONING) (ACETIC ACID—THERAPEUTIC USE)
(CORTISONE)

MAKASHEV, K.K.

Effect of calcium and disodium salt of ethylenediaminetetraacetic acid on the absorption and accumulation of lead by and its removal from the body in lead poisoning. Trudy Inst.kraev.pat. AN Kazakh. SSR 10:180-189 '62. (MIRA 16:5)

(LEAD POISONING) (ACETIC ACID—THERAPEUTIC USE)

BUTRIMOVA, N.P.; MAKASHEV, K.K.

Effect of sodium salicylate on the development of experimental silicosis in white rats. Trudy Inst.kraev.pat. AN Kazakh. SSR 10:78-94 '62. (MIRA 16:5)
(LUNGS—DUST DISEASES) (SODIUM SALICYLATE—THERAPEUTIC USE)

ATCHABAHOV, B.A., kand.med.nauk; MAKASHEV, K.K., kand.med.nauk; SHESTAKOVA, N.P.

Fate of lead introduced into the organism. Vest.AN Kazakh.SSR 17 no.5:48-55 My '61. (MIRA 14:6)
(LEAD IN THE BODY)

MAKASHEV, K.K.

Changes in the body's immunological properties in lead poisoning.
Trudy Inst.kraev.pat. AN Kazakh.SSR 4:34-41 '56. (MLRA 10:3)
(LEAD POISONING) (IMMUNITY)

MAKASHEV, K.K

ATCHABAR(V, B.A., MAKASHEV, K.K.

Behavior of lead in the body. Trudy Inst.kraev.pat. AN Kazakh. SSR 4:5-21 '56. (MLRA 10:3)

(LEAD IN THE BODY)

MAKASHEV, K.K.

Changes in complement and imune antibodies titer during complete replacement and cross transfusion of blood. Trudy Inst.kraev.pat. AN Kazakh.SSR 2:32-59 '54. (MLRA 10:1)

(BLOOD--TRANSFUSION) (COMPLEMENTS (IMMUNITY))
(ANTIGENS AND ANTIBODIES)

MAKASHEV, K.K.

Changes in the biological properties of blood in experimental morphine shock. Trudy Inst.kraev.pat. AN Kazakh.SSR 1:140-143 '52. (MLRA 10:2)
(BLOOD--ANALYSIS AND CHEMISTRY)
(MORPHINE) (SHOCK)

GLOZMAN, O.S.; MAKASHEV, K.K.

Stricture method in determining the toxin content of solutions and the degree of toxemia. Izv. AN Kazakh.SSR. Ser.kraev.pat. no.6: 147-151 '50. (MLRA 9:8)

(TOXINS AND ANTITOXINS)

MAKASHEV, K. A.

The second prize (imeni N. A. Minkevich) was awarded to Candidate of Technical Sciences V. A. Yakovlev, Engineers Ya. N. Spektor and K. A. Makashev for the paper "New Heat Treatment Technology for Tubular Components of a Complex Geometrical Shape Using Induction Heating for the Hardening Process".

Results of the 1958 Competition for Obtaining imeni D. K. Chernov and imeni N. A. Minkevich Prizes, Metallovedeniye i termicheskaya obrabotka metallov, 1959, No. 6, pp 62-64

MAKASHEV, A.P., prof.; POLETAYEVA, N.N., starshiy nauchnyy sotrudnik; ISAGULYAN, E.A., mladshiy nauchnyy sotrudnik

Experimental storage of apples in film wrapping material and containers. Khol.tekh. 41 no.1:36-41 Ja-F '64. (MIRA 17:3)

1. Krasnodarskiy nauchno-issledovatel'skiy institut pishchevoy promyshlennosti.

MAKASHEV, A.P.; Prinimali uchastiye: ALDAKIMOVA, A.Ya.; MINKINA, A.I., mladshiy nauchnyy sotrudnik; SOKOLOVA, Ye.V.

[Use of carbon dioxide in fish preservation]. Primenenie ugle-kisloty pri khranenii ryby. Moskva, Pishchepromizdat, 1959. 136 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut morskogo rybnovo khoziaistva i okeanografii. Trudy, vol. 37). Trudy VNIRO 37 '59. (MIRA 17:4)

1. Starshiye laboranty tekhnologicheskoy laboratorii Dono-Kubanskogo otdeleniya Azovsko-Chernomorskogo nauchno-issledovatel'skogo instituta morskogo rybnogo khozyaystva i okeanografii (for Aldakimova, Sokolova). 2. Tekhnologicheskaya laboratoriya Dono-Kubanskogo otdeleniya Azovsko-Chernomorskogo nauchno-issledovatel'skogo instituta morskogo rybnogo khozyaystva i okeanografii (for Minkina).

5(1)
AUTHOR: Makashev, A. P. SOV/32-25-3-55/62

TITLE: Gas Analyzer - Pipette (Gazoanalizator - pipetka)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 3, pp 378-379 (USSR)

ABSTRACT: The apparatus described was designed for the determination of carbon dioxide, nitrogen, and carbon monoxide gases. Accuracy of measurement at a small consumption of reagents and an analysis duration of 1-1.5 minutes is given as 0.2-0.5 %. The apparatus (Fig) has a graduated pipette with a length of about 400 mm and a diameter of about 1 mm. A small diaphragm pump is attached to the upper end of the pipette; when a screwhead is turned, the pump sucks the gas or liquid sample into the pipette. The absorption liquid is introduced in the same manner into the pipette filled with the gas sample, and gas and absorption liquid are mixed by turning the screwhead back and forth. Comparative analyses carried out in the apparatus described and in the apparatus according to Orsat-Fischer (CO_2 determinations)(Table) showed practically equal results.

There are 1 figure and 1 table.

ASSOCIATION: Krasnodarskiy konservnyy institut(Krasnodar Institute for Canning)

Card 1/1

MAKASHEV, A. P.

"Carbon Dioxide as a Means of Prolonging the Storage Life of Chilled Fish Products."

Report submitted for the 10th Intl. Refrigeration Congress, Copenhagen, 19 August - 2 September 1959.

MAKASHEV, A. P., Doc of Tech Sci -- (diss) "Theoretical and Experimental Research on the Use of Carbon Dioxide for the Perservation of Fish and Fish Product$," Krasnodar, 1959, 20 pp (Leningrad Technological Institute of the Refrigiration Industry) (KL, 2-60, 112)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500023-6

MAKASHEV, A.P., kand. tekhn. nauk; MINKINA, A.I., kand.biol.nauk; AKIMOVA, A.Ya.; SOKOLOVA, Ye.V.

Effect of the intensity of proteolysis and the presence of microbes on the occurrence of "split bellies" in some fish species. Trudy VNIRO 35:145-151 '58. (MIRA 11:11)

1. Azovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta morskogo rybnogo khozyaystva i okeanografii.
(Fishery products--Preservation) (Food spoilage)

MAKASHEV, A.P.; KUZNETSOV, P.G., red.; SLUZHITEL', Ye.I., tekhn.red.

[Methods of prolonging the storage of refrigerated fish] Sposoby udlineniia srokov khraneniia okhlazhdennoi ryby. Moskva, Vses.in-t nauchn.i tekhn.informatsii, 1958. 36 p. (MIRA 13:4)

(Fish--Storage)

MAKASHEV, A. P.

USSR/Chemical Technology - Chemical Products and Their Application. Food Industry, I-28

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63722

Author: Karnitskaya, N. V., Firsova, V. I., Makashev, A. P., Aldakimova, A. Ya.

Institution: ~~None~~ A-U Sci Res Inst Sea Fish And Oceanography

Title: Action of Carbon Dioxide on Botulism Microbe in Fish Processed by Hot Smoking

Original Periodical: Vopr. pitaniya, 1956, Vol. 15 No 2, 49-50

Abstract: Study of the effects of storage of fish, that has been hot-smoked, in an atmosphere of CO_2 (70-90%) on toxin formation by B. botulinus, the spores of which are found in the intestines of some fish under natural conditions. It was found that hot-smoked fish of small and medium size is preserved in CO_2 in good condition (according to organoleptic characteristics) for 15 days as compared with 2-3 days of the controls. Storage of fish in an atmosphere of CO_2 neither inhibits nor stimulates germination of spores and toxin production of B. botulinus.

Card 1/1

MAKASHEV, A. P., BEREZIN, N. T.

Fisheries

Separation of ruff from herring by a hydraulic process. Ryb. Khoz., 28 no. 3, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS. Library of Congress, July 1952. UNCLASSIFIED.

MAKAS, I.K., inzhener.

Rewinding sections with mica fiber casing for high-power electrical machines. Vest.elektroprom. 18 no.10:23-24 O '47. (MLRA 6:12)

1. Energoremtrest MEP.

(Electric machinery--Maintenance and repair)

MAKARYUNAS, K. V.; MAKARYUNENE, E. K.; DARACHYUNAS, A. I.

"Automatic Calculation of Accidental Coincidences in Schemes for Measurement of Angular Correlations of Cascade Gamma-Rays."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

IFM LitSSR (Inst Physics & Mathematics, AS LitSSR)

MAKARYUNAS, K. V. [Makariunas, K.]

Concerning the mechanism of the reaction $Be^9(\alpha, n)C^{12}$ when $E_\alpha = 3,22$ MeV. Liet ak darbai B no.1:125-127 '61. (EEAI 10:9)

1. Institut fiziki i matematiki Akademii nauk Litovskoy SSR.

(Beryllium) (Particles) (Carbon)

MAKARYUNAS, K. V.[Makariunas, K.]

On angular distribution of 12 MeV energy protons, scattered non-elastically around lithium nuclei and on spin of the lithium^7 nucleus of 4,61 MeV energy level. Liet ak darbai B no.1:121-123 '61. (EEAI 10:9)

1. Institut fiziki i matematiki Akademii nauk Litovskoy SSR.

(Lithium) (Protons) (Nuclear spin)

MAKARYUNAS, K. V.[Makariunas, K.]

Effective sections of some reactions (d,α), (α,t), (α,d) and (α,p), flowing through lithium nuclei. Liet ak darbai B no.1: 117-120 '61. (EEAI 10:9)

1. Institut fiziki i matematiki Akademii nauk Litovskoy SSR.

(Lithium) (Particles)

33668

S/058/61/000/012/023/083
A058/A101

24.6600

AUTHORS: Starodubtsev, S. V., Makaryunas, K. V.

TITLE: Elastic and inelastic scattering of 13.2 Mev alpha particles by lithium, and the $Li^6(\alpha, p)Be^9$ and $Li^7(\alpha, p)Be^{10}$ reactions

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1961, 116, abstract 12B613 ("Tr. Tashkentsk. konferentsii po mirn. ispol'zovaniyu atomn. energii", 1959, v. 1, Tashkent, AN UzSSR, 1961, 98-103)

TEXT: The $Li^6(\alpha, p)$ and $Li^7(\alpha, p)$ reactions and the scattering of 13.2 Mev alpha particles by lithium were studied by the photographic emulsion method. The angular distribution of alpha particles elastically scattered by Li^7 differs from the Coulomb distribution. Proton groups from $Li^6(\alpha, p)$ and $Li^7(\alpha, p)$ reactions can be separated only for large angles. The spectrum of the proton tracks from these reactions that can be observed at $\theta_{lab} = 170^\circ$ is given. The intensity ratio of proton groups from $Li^7(\alpha, p)$ and $Li^6(\alpha, p)$ equals 1.7 : 1. The differential cross sections of the same groups equal 0.16 ± 0.06 and 1.17 ± 047 mbarn/sterad respectively. The angular distribution of protons from these two reactions are analyzed on the basis of the Butler theory.
[Abstracter's note: Complete translation]

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4

Investigation of alpha-particle ...

part take place without production of composite nuclei. What is more, the authors hold that the great cross-section magnitude of these reactions (tens of millibarns) can be explained by the existence of a deuteron and a trion substructure in the Li^6 and Li^7 nuclei respectively.

[Abstracter's note: Complete translation]

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33667
S/058/61/000/012/022/083
A058/A101

24.6600

AUTHOR: Makaryunas, K. V.

TITLE: Investigation of alpha-particle interaction with lithium nuclei

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1961, 115-116, abstract 12B612 ("Tr. Tashkentsk. konferentsii po mirn. ispol'zovaniyu atomn. energii", 1959, v. 1, Tashkent, AN UzSSR, 1961, 85-89)

TEXT: In order to study the mechanism of alpha-particle interaction with Li nuclei by the thick nuclear photoemulsion method, the angular distributions of particles from the following reactions between 10, 15, 11.5 and 13.2 Mev alpha particles and Li^6 and Li^7 were investigated: $Li^7(\alpha, \alpha')Li^{7*}$ Q = -4.61 Mev; $Li^6(\alpha, d)Be^8$ Q = -1.59 Mev; $Li^7(\alpha, p)Be^{10}$ Q = -2.56 Mev; $Li^6(\alpha, p)Be^9$ Q = -2.13 Mev and $Li^7(\alpha, t)Be^8$ = = -2.56 Mev. For the last two reactions a general angular distribution was plotted inasmuch as protons from these reactions have very close energies and could not be separated. All the angular distributions evince anisotropic structure, and their shape depends rather weakly on the energy of the bombarding particles. The form of the angular distributions indicates that $Li^6(\alpha, d)$ and $Li^7(\alpha, d)$ reactions for the most

Card 1/2

Investigation of the Reactions (α,α'), (α,p), and (α,t) on Lithium Nuclei

82012
S/056/60/038/02/09/061
B006/B011

ASSOCIATION: Leningradskiy fiziko-tekhnicheskiy institut Akademii nauk SSSR (Leningrad Institute of Physics and Technology of the Academy of Sciences, USSR)

SUBMITTED: August 7, 1959

Card 4/4

Investigation of the Reactions (α,α'), (α,p), and (α,t) on Lithium Nuclei

S/056/60/038/02/09/061
B006/B011

at E_α = 10.15, 11.5, and 13.2 Mev, and Fig. 4 the angular distribution of protons in the center-of-mass system at E_α = 11.5 Mev. The angular distribution in the center-of-mass system is strongly anisotropic and asymmetric with respect to $\theta = 90^\circ$. The angular distribution of tritons originating from the reaction $Li^7(\alpha,t)Be^8$ (Q = - 2.56 Mev) is shown for E_α = 10.15 Mev in Fig. 5, and also, for comparison, the distribution curve calculated according to Butler. A curve calculated according to the stripping theory is shown as well. It is very similar to the one of the knock-out theory. The authors finally thank the cyclotron team headed by A. B. Girshin, and also the collaborators of the laboratoriya yadernykh reaktsiy LFTI (Laboratory of Nuclear Reactions of the LFTI) for their assistance in the experiments. There are 5 figures and 14 references: 2 Soviet, 9 American, 1 British, 1 Japanese, and 1 Polish.

Card 3/4

82012
S/056/60/038/02/09/061
B006/B011

Investigation of the Reactions (α,α'), (α,p), and (α,t) on Lithium Nuclei

particle energy spectra as well as the angular distributions of the particle groups were determined. The deviations of the absolute values of the differential cross sections from the mean values did not exceed 30-40% in the various experiments. Results concerning the angular distributions of the various reactions are outlined in the paper under review. Angular distribution of reaction $Li^7(\alpha,\alpha')Li^{7*}$ (Q = - 4.61 Mev): Fig. 2 shows the angular distribution of α-particles undergoing inelastic scattering on Li^7, at E_α = 13.2 Mev. The cross section calculated from an integration of the angular distribution from 15 to 90° (in the center-of-mass system) was found to be 147 ± 60 mb. A comparison (Fig. 2) with Butler's theory (Ref. 3) shows that the parity of the 4.61-Mev level of the Li^7 nucleus is negative, and that it has a spin of 1/2, 3/2, 5/2, or 7/2 (ground state of $3/2^-$). Angular distributions of the reactions $Li^6(\alpha,p)Be^9$ (Q = -2.13 Mev) and $Li^7(\alpha,p)Be^{10}$ (Q = -2.56 Mev): Fig. 3 shows the angular distributions of protons originating from these reactions in the laboratory system

Card 2/4

MAKARYUNAS, K. V.

S/056/60/038/02/09/061
B006/B011

24.6600

AUTHORS: Makaryunas, K. V., Starodubtsev, S. V.

TITLE: Investigation of the Reactions (α,α'), (α,p), and (α,t) on Lithium Nuclei

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 2, pp. 372 - 378

TEXT: The investigations dealt with in the present paper were conducted on the cyclotron of the Leningradskiy fiziko-tekhnicheskiy institut (Leningrad Institute of Physics and Technology). α-particles with 10.15, 11.5, and 13.2 Mev were used for the experiments. A scattering chamber of 50 cm diameter was connected to the cyclotron, and the target was placed in its center; this was surrounded by photographic plates contained in special boxes. The plates were of the type Я-2 (Ya-2) with an emulsion thickness of 100 μ. The target consisted of metallic lithium in natural isotopic composition (0.75 - 1.1 mg/cm^2) and was situated in dry carbon dioxide. The plates were evaluated by means of a microscope of the type МБИ-3 (MBI-3); the track lengths were measured, and the

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MAKARYUNAS, K. V., Cand Phys-Math Sci -- (diss) "Investigation of the reactions (a, á), (a, p), (a, d) and (a, t) with lithium nuclei." Leningrad, 1960. 10 pp; (Leningrad Physics-Technology Inst of the Academy of Sciences USSR); 250 copies; price not given; bibliography on page 10 (10 entries); (KL, 17-60, 139)

On the Mechanism of Direct Interaction in the Reaction $Li^6(\alpha,d)Be^8$

66452
SOV/20-129-3-20/70

bombarding particles. All this, and the rather large reaction cross section are indicative of the important part played by the process developing without the formation of a compound nucleus. Probably, the α-particles knock out deuterons from the L^6-particles and a substructure in form of a deuteron probably exists in the L^6-nucleus for a certain time. There is a certain agreement between Butler's theory and experimental results. The authors thank the co-workers of the Physico-technical Institute of the AS USSR, who collaborated in the present investigation. There are 1 figure and 9 references, 2 of which are Soviet.

SUBMITTED: June 26, 1959

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66452

On the Mechanism of Direct Interaction in the Reaction $Li^6(\alpha,d)Be^8$ SOV/20-129-3-20/70

in the reaction $Li^6(\alpha,d)Be^8$, Q = -1.59 Mev. The authors investigated the angular distribution of this group. At certain small angles this group cannot be separated from the very intense group of recoil protons, so that the total angular distribution at these angles was not found. A diagram shows the angular distributions measured in the center of mass system at various energies of the bombarding α-particles (10; 15; 11.5 and 13.2 Mev). The absolute value of the differential cross section of the reaction $Li^6(\alpha,d)Be^8$ for the angle 58° amounts to 6.7 millibarn/steradian in the center of mass system. The integral cross section approximately determined with respect to the angular distribution is, with E_α = 10.15 Mev, not less than 50 millibarn. With an energy increase from 10.15 to 13.2 Mev, the cross section becomes smaller. Angular distributions are sharply anisotropic, they vary continuously with a variation of energy, and are asymmetric with respect to the angle of 90°. The minimum is shifted towards smaller angles with an increasing energy of the

Card 2/3

~~21 (7)~~ 24.6600

66452

AUTHORS: Starodubtsev, S. V., Academician of the Uzbekskaya SSR, Makaryunas, K. V. SOV/20-129-3-20/70

TITLE: On the Mechanism of Direct Interaction in the Reaction $Li^6(\alpha,d)Be^8$

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 3, pp 547-549 (USSR)

ABSTRACT: First, a brief report is given about the present stage of the problem on the basis of some earlier papers. The authors carried out experiments with α-particles of the energy of 8.34 and 13.2 Mev, which were accelerated in the cyclotron of the Fiziko-tekhnicheskiy institut Akademii nauk SSSR (Physico-technical Institute of the Academy of Sciences, USSR). Lithium targets of natural isotopic composition were then bombarded herewith. The particles emitted from the target were recorded on photographic plates of the type Ya-2 (emulsion thickness 100 μ), which were located in a scattering chamber constructed by S. V. Starodubtsev, Ye. M. Lobanov and I. M. Shcheglov. The average angle between the plane of the photographic plate and the direction of motion of the secondary particles leaving the targets amounted to 10°. During investigation of the photographic plates under the microscope, an intense group of deuterons was found which had been produced

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The Angular Distributions of Tritons From the Reaction $Li^7(\alpha,t)Be^8$ SOV/56-36-5-61/76

α-particles indicates the important part played by the direct interaction mechanism. A comparison with Butler's theory shows good agreement for $l = 1$ between the theoretical and the experimental curve. The absolute values of the differential cross sections at 16° (center of mass system) are given as amounting to $9.2^{+3.7}_{-1.85}$ mb/steradian ($E_\alpha = 13.2$ Mev) and $9.4^{+4.0}_{-2.0}$ mb/steradian ($E_\alpha = 14.7$ Mev). There are 2 figures and 2 references.

ASSOCIATION: Leningradskiy fiziko-tekhnicheskiy institut (Leningrad Physico-Technical Institute)

SUBMITTED: February 4, 1959

Card 2/2

21(7)

AUTHORS: Starodubtsev, S. V., Makaryunas, K. V. SOV/56-36-5-61/76

TITLE: The Angular Distributions of Tritons From the Reaction $Li^7(\alpha,t)Be^8$ (Uglovyye raspredeleniya tritonov iz reaktsii $Li^7(\alpha,t)Be^8$)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 5, pp 1594-1595 (USSR)

ABSTRACT: In order to obtain information concerning the reaction mechanism the authors of the present "Letter to the Editor" investigated the angular distributions of tritons in the aforementioned reaction at Q = - 2.56 Mev by the method of the thick photoemulsion. The α-particles were accelerated on the cyclotron to 8.34, 10.15, 11.5, 13.2 and 14.7 Mev. At all these energies similar angular distributions were obtained. The curves obtained representing the dependence of the differential cross section (in relative units) on the angle in the center of mass system is shown for E_α = 14.7 Mev by the upper and for E_α = 13.2 Mev by the lower figure. The form of the angular distributions and their weak dependence on the energy of the bombarding

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MAKARYINA, L.A. (CONTINUED)

The results agree with the calculated data obtained by the Monte Carlo method, taking into account the effect of the medium on Bremsstrahlung (Landau-Pomeranchuk and Ter-Mikaelyan effects).

For 10 cascades with E 1.8×10^{11} ev, the probability of p ( )^2 from the criterion / ^{2}, is 2.5 + 5% when compared with the curves which do not consider the effect of the medium, and 80-95% when compared with the calculations that take into consideration the effect of the medium on the Bremsstrahlung.

report presented at the International Cosmic Ray Conference, Moscow 6-11 July 1959

MAKARYINA, L.A.

"ELECTRON-PHOTON CASCADES WITH ENERGIES FROM 10^{11} to 10^{13} ev IN NUCLEAR EMULSIONS"

L. S. Makaryina, A. A. Vorfolomeyev, R.I. Gerasimova, I.I. Gurevich, A.S. Romantseva, S.A. Chuyeva,

Fifteen electron-photon caseades with energies from 10^{11} to 10^{13} ev, recorded in six emulsion stacks with a total volume of 10 l, have been investigated.

The energies of the primary photons evoking the cascades were determined by the energy spectrum of the cascade electrons at a depth of 2.5 -: $3t_o$ (t_o - rad. unit).

The grain density and the gap density were measured for the first pairs. In all the pairs with energies $3x10^{11}$ ev, a decrease in grain density at the apex caused by the screening effect was discovered.

The following experimental relation of the ionization losses of pair (1) was obtained:

where Ipe is the spedific ionization electron loss at the ionization plateau, x is the distance fromthe apex of the pair in cm, and E, is the energy of the photon which produced the pair.

The expression obtained for I/2ipe may be used to determine the E energy from experimental values for I. An estimation of the E error is given, taking into consideration the screening effect.

The number of electron-positron pairs produced at depths of $1.0t_o$ and $1.5t_o$ was measured.

Makaryina, L.A.

"DIRECT PRODUCTION OF ENECTRON-POSITRON PAIRS BY HIGH ENERGY ELECTRONS"

L.A. Makaryina, Ap.P. Mishakova, A.S. Romantseva, G.S. Stolyarova, V.A.Tumanyan, S.A. Chuyeva, A.A. Varfolomeyev, R.I. Gerasimova,

The Cross=section of direct production of electron-positron pairs by high energy electrons was measured experimentally. For this purpose, a study was made of isolated electron-photon cascades and the photon component of high energy muclear interactions in emulsion stacks exposed to radiation in the stratosphere. In order to exclude spurious cases of direct pair production, which constitute the main difficulty in experimental measurement of the cross-section of such pairs, the calculation was carried out by the Monte Carlo method.

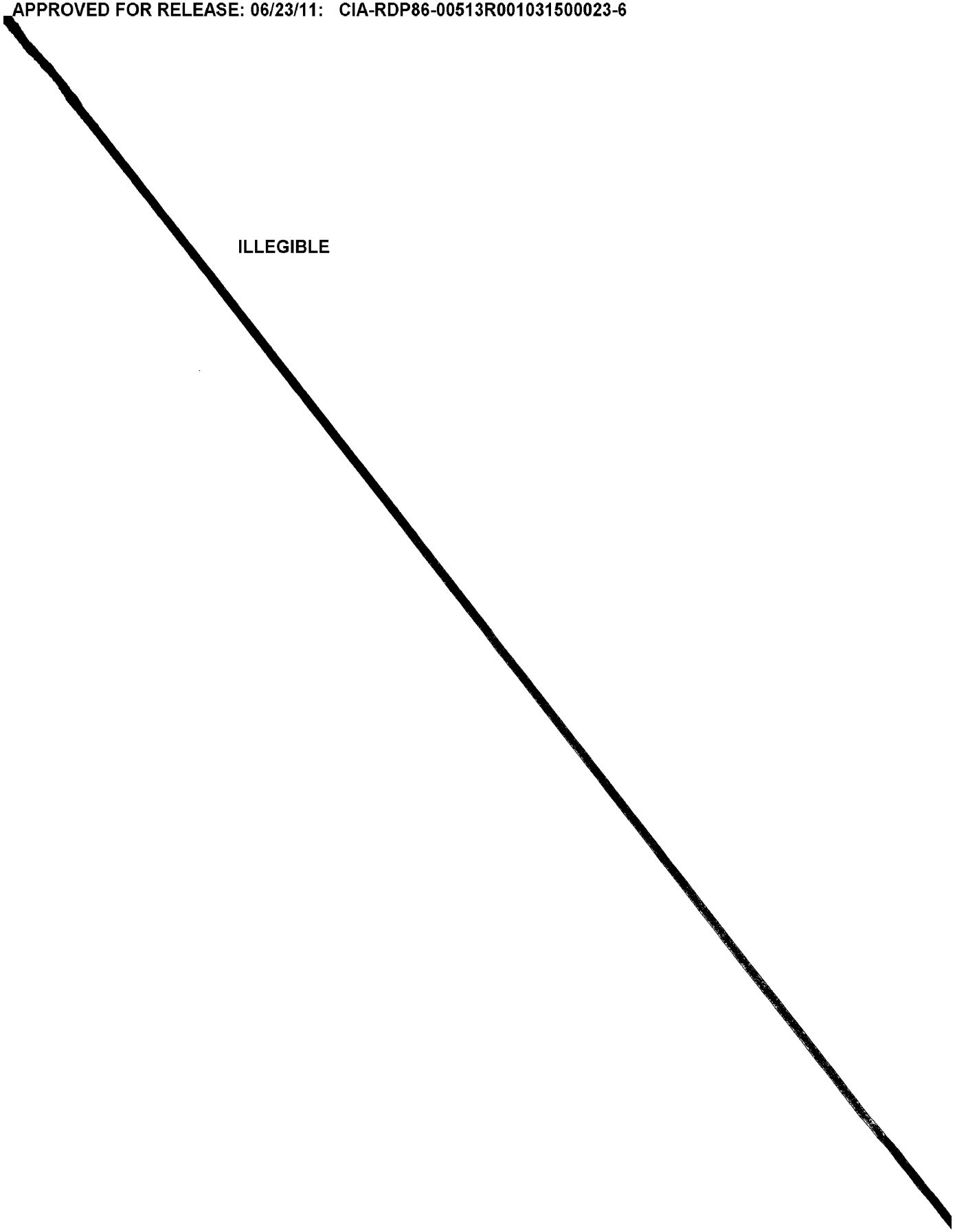
The calculation was made for three values of primary electron energy: 10, 100 and 1,000 Bev, taking into consideration two possible variants of the Bremsstrahlung spectrum: Bethe-Heitler and Migdal variants (Landau-Pomeranchuk and Ter-Mikaelyan effects). A method for determining the energy of ultra-relativistic electrons from the lateral distribution of te apexes of electron-positron pairs is suggested.

During the experimental measurement of very high electron energies, certain possible sources of underestimation were eliminated.

The cross section of direct pair production by high energy electrons was found to be in agreement with Bhabha's calculation within the limits of experimental error/

report presented at the International Cosmic Ray Conference, Moscow 6-11 July 1959

ILLEGIBLE



KAZANTSEV, Anatoliy Mikhaylovich, kand. tekhn. nauk, dots; Prinimali uchastiye: LIVSHITS, I.M., inzh.; MAKAR'YEVSKIY, D.P., inzh.; GUSEV, M.N., kand. tekhn. nauk, dotsent, retsenzent; SHEVALDYSHEV, L.G., inzh., retsenzent; BARIT, G.Yu., red.; VOLCHOK, K.M., tekhn. red.

[Technical norms in shipbuilding and ship repairs] Tekhnicheskoe normirovanie v sudostroenii i sudoremonte. Leningrad, Izd-vo "Rechnoi transport," 1962. 383 p. (MIRA 15:5)
(Shipbuilding--Production standards)
(Ships--Maintenance and repair--Production standards)

LIVSHITS, I.; MAKAR'YEVSKIY, D. P.

Setting consolidated work norms in mechanical treatment of surfaces. Sots.trud no.3:81-87 Mr '58. (MIRA 13:3)
(Turning--Production standards)

MAKAR'YEVSKIY, D.P., inzhener.

Improved technology for finishing operations in ship repairs.
Rech.transp. 14 no.12:29-30 D '55. (MLRA 9:3)
(Ships--Maintenance and repair)

CHERKASHEV, A.P., akademik; KOVALENKO, Ye.Ye., kand. tekhn. nauk; RYABOKON', N.F., inzh.; STAROSELETSKIY, M.I., inzh.; KLYUKIN, A.N., inzh.; POCHKAYEV, A.G., inzh.; MAKAYEVA, Z.L., inzh.; BOCHKAREV, V.A., inzh.; KOZLOV, G.S.; TRAKHTSAN, L.I.

Investigating the process of rolling wheels at the Nizhniy Tagil metallurgical combine. Stal' 25 no.6:543-546 Je '65. (MIRA 18:6)

1. VNIITI i Nizhne-Tagil'skiy metallurgicheskiy kombinat.

MAKARYEVA, S. P.

USSR/Chemistry - Physical chemistry

Card 1/1 ; Pub. 22 - 36/46

Authors ; Shigorin, D. N; Mikhaylov, N. V.; and Makaryeva, S. P.

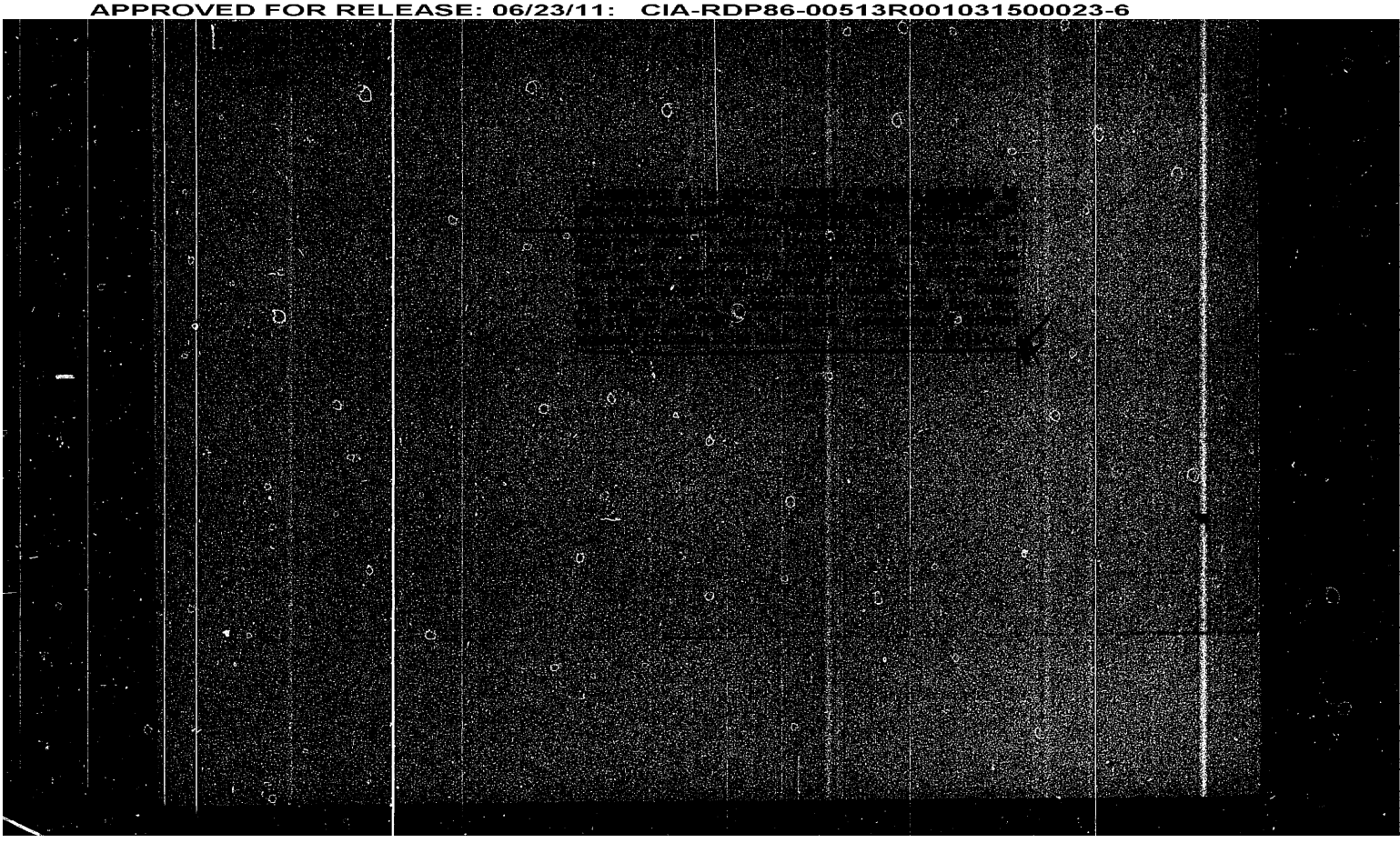
Title ; The physical structure of synthetic polyamides investigated by the infrared absorption spectra method

Periodical ; Dok. AN SSSR 97/4, 711-714, Aug 1, 1954

Abstract ; The application of the infrared absorption spectra method for the physico-chemical study of synthetic polyamides, is discussed. A comparison of absorption spectra of various synthetic polyamides showed that the structure of the latter is determined by a combination of three (alpha, beta, gamma) H-bonds. The existence of the three basic H-bonds in synthetic polyamides, which in fact determine their physical structure and chemical properties, was positively established. These three H-bonds are also responsible for the crystalline lattice of the synthetic polyamides. Eight references: 4-USSR and 4-USA (1936-1954). Table; drawing.

Institution ; All-Union Scientific-Research Institute of Synthetic Fibers

Presented by ; Academician V. A. Kargin, May 10, 1954



APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500023-6

MAKAR'YEVA, S. P.

USSR/Chemistry - Synthetic Fibers Dec 52

"Investigation of the Physical Structure of Synthetic Polyamides by the Method of Oscillation Spectra," N. V. Mikhaylov, D. N. Shigorin and S. P. Makar'yeva, All Union Sci Res Inst of Synthetic Fibers

"Dan SSSR" Vol 87, No 6, pp 1009-1012

The nature of bonds holding the fibers together in a polycaprolactam fiber were studied using infra-red absorption spectroscopy. Comparison of the results obtained from spectral analysis with dats on the mech properties of polycaprolactam confirm the assumption concerning the chain-cyclic molecular structure based on the presence of intermolecular and intramolecular hydrogen bonds. Presented by Acad A. N. Terenin 24 Oct 52

PA 240T8

FDD PA 169T20

MAKAR'YEVA, S. P.

USSR/Chemistry - Synthetic fibers, Analysis Sep 50

"Potentiometric Determination of Sulfates in the Precipitating Bath of the Viscose Silk Manufacturing Process," S. G. Zelikman, S. P. Makar'yeva, A. B. Pakshver, All-Union Sci Res Inst of Synthetic Fiber

"Zavod Lab" Vol XVI, No 9, pp 1053-1057.

Develops method for potentiometric titration of precipitating baths with Ba chloride in presence of H peroxide. Demonstrates possibility of potentiometric titration of precipitating baths with Pb nitrate with ferroferricyanide electrode as indicator. Recommends [redacted] method as more efficient.

PA 169T20.

USSR/Chemistry - Chlorine
Chemistry - Analysis

Nov 1947

"Amperometric Method of Determining Chlorine," S. P. Makar'yeva, Z. G. Bezzubik, M. A. Proskurnin, Physicochemical Institute imeni L. Ya. Karpov, 4½ pp

"Zavodskaya Laboratoriya" Vol XIII, No 11

Discusses the experiments which were conducted to determine a method for measurements by amperometric calculations. Describes the experiment and lists the results. Authors were able to develop a gas analyzer for chlorine which made use of a silver electrode, and was sensitive to concentrations of 0.05 to 1.5% chlorine. They also established a proportion between

36T12

USSR/Chemistry - Chlorine (Contd) Nov 1947

the concentration of chlorine in the gaseous mixture to the strength of the depolarization current. When temperatures were raised to 40° and chlorine concentrations were 0.7% or more it was found that the depolarization current fell.

36T12

MAKAR'YEVA, S. P.

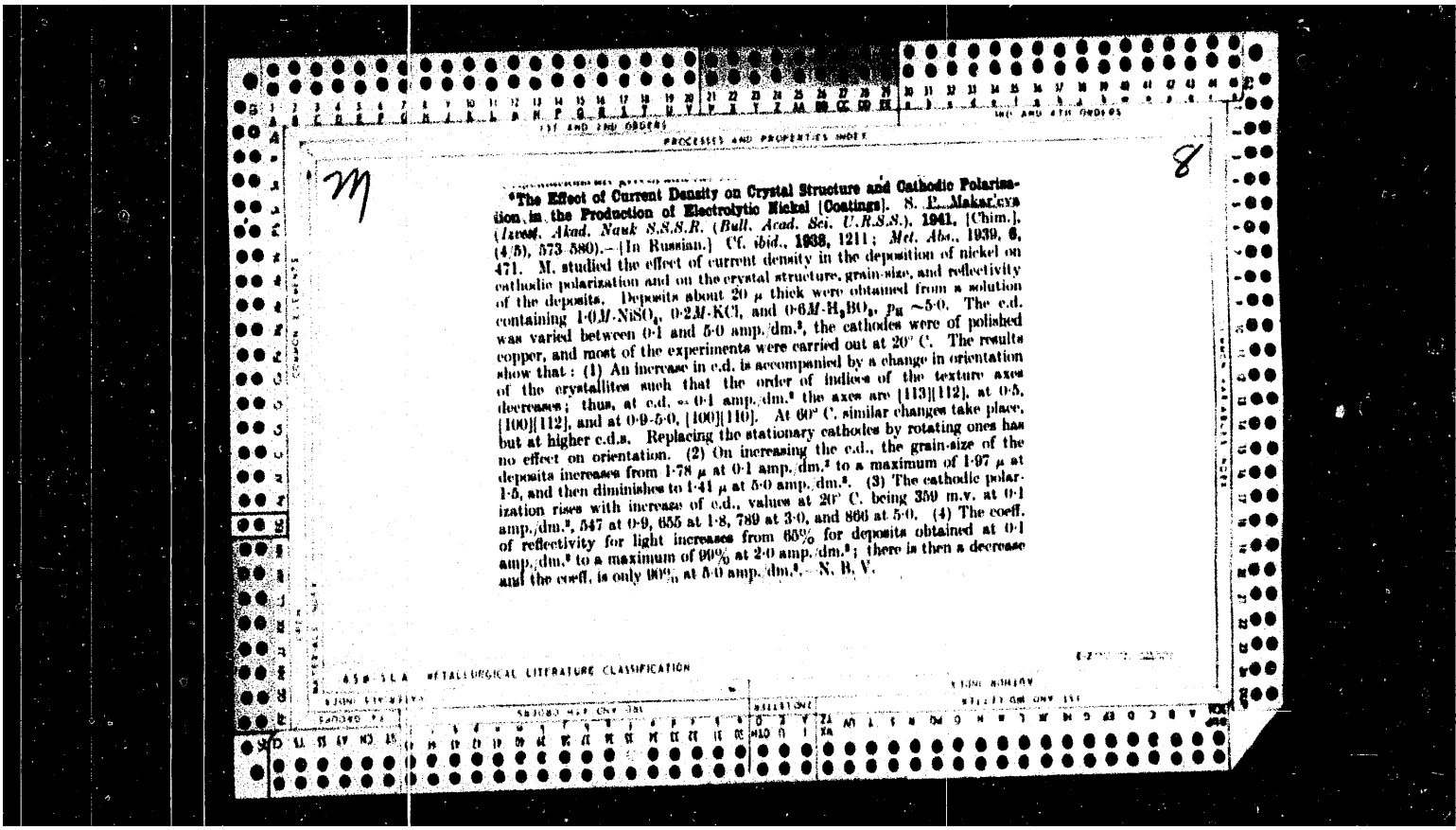
MAKAR'YEVA, S. F.

Metal-plating Lab. Colloid-Electrochemical Inst., Acad. of Sci., USSR (-1941-)

"The Influence of Surface-active Substances and Inorganic Salts on the Orientation of Crystals of Copper Plating." Zhur. Fiz. Khim., Vol. 17, No. 3, 1943.

PR-52059019

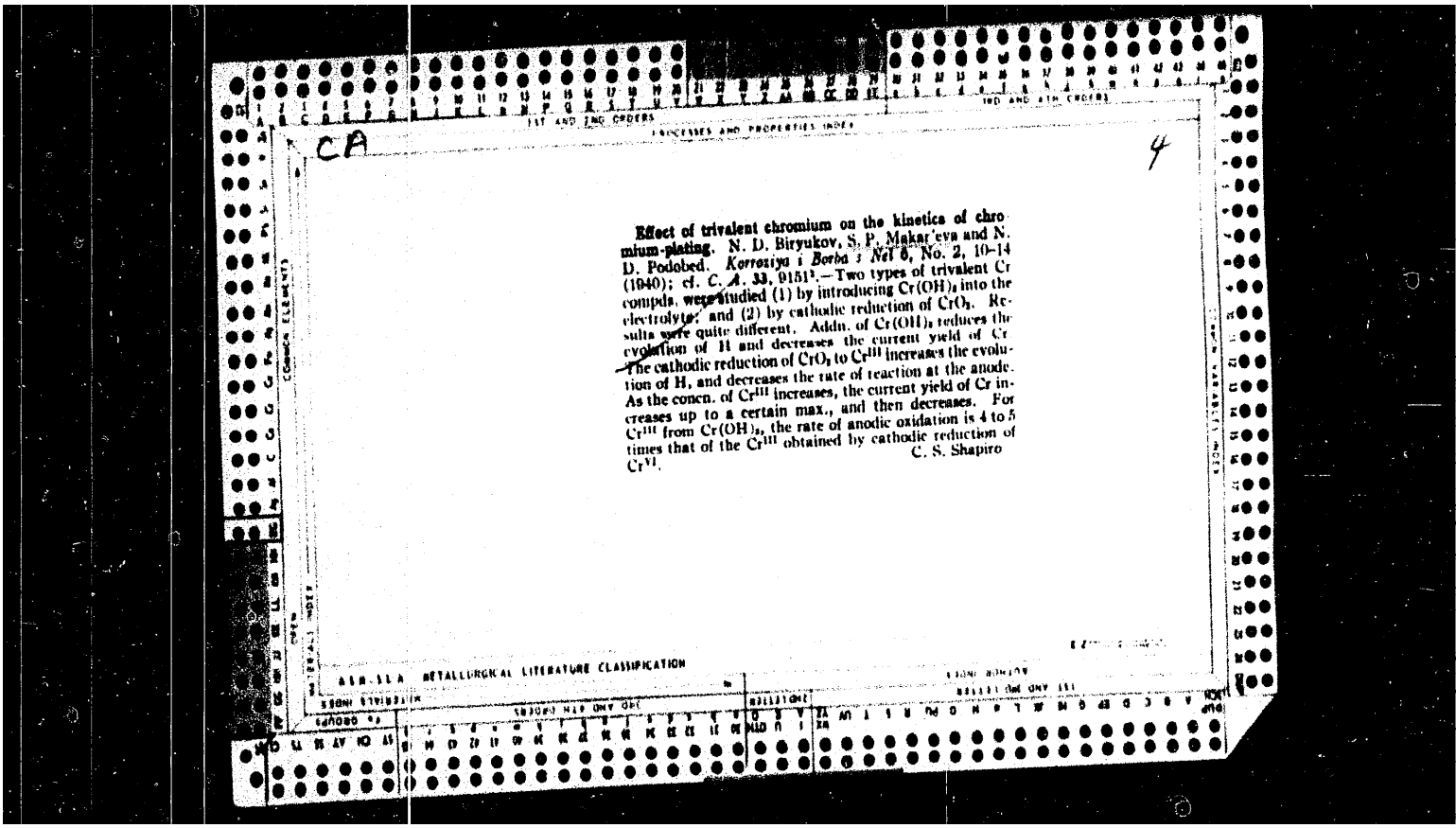
APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500023-6



PROCESSES AND PROPERTIES INDEX

The Effect of Current Density on Crystal Structure and Cathodic Polarisation in the Production of Electrolytic Nickel [Coatings]. S. P. Makar'eva (*Izvest. Akad. Nauk S.S.S.R.* (*Bull. Acad. Sci. U.R.S.S.*), **1941**, [Chim.], (4/5), 573-580).—[In Russian.] Cf. *ibid.*, **1938**, 1211; *Met. Abs.*, 1939, **6**, 471. M. studied the effect of current density in the deposition of nickel on cathodic polarisation and on the crystal structure, grain-size, and reflectivity of the deposits. Deposits about 20 μ thick were obtained from a solution containing 1·0*M*-$NiSO_4$, 0·2*M*-KCl, and 0·6*M*-H_3BO_3, p_H ~5·0. The c.d. was varied between 0·1 and 5·0 amp./dm.^{2}, the cathodes were of polished copper, and most of the experiments were carried out at 20° C. The results show that: (1) An increase in c.d. is accompanied by a change in orientation of the crystallites such that the order of indices of the texture axes decreases; thus, at c.d. ~ 0·1 amp./dm.^{2} the axes are [113][112], at 0·5, [100][112], and at 0·9-5·0, [100][110]. At 60° C. similar changes take place, but at higher c.d.s. Replacing the stationary cathodes by rotating ones has no effect on orientation. (2) On increasing the c.d., the grain-size of the deposits increases from 1·78 μ at 0·1 amp./dm.^{2} to a maximum of 1·97 μ at 1·5, and then diminishes to 1·41 μ at 5·0 amp./dm.^{2}. (3) The cathodic polarization rises with increase of c.d., values at 20° C. being 359 m.v. at 0·1 amp./dm.^{2}, 547 at 0·9, 655 at 1·8, 789 at 3·0, and 866 at 5·0. (4) The coeff. of reflectivity for light increases from 65% for deposits obtained at 0·1 amp./dm.^{2} to a maximum of 90% at 2·0 amp./dm.^{2}; there is then a decrease and the coeff. is only 80% at 5·0 amp./dm.^{2}.—N. B. V.

A58-SLA METALLURGICAL LITERATURE CLASSIFICATION



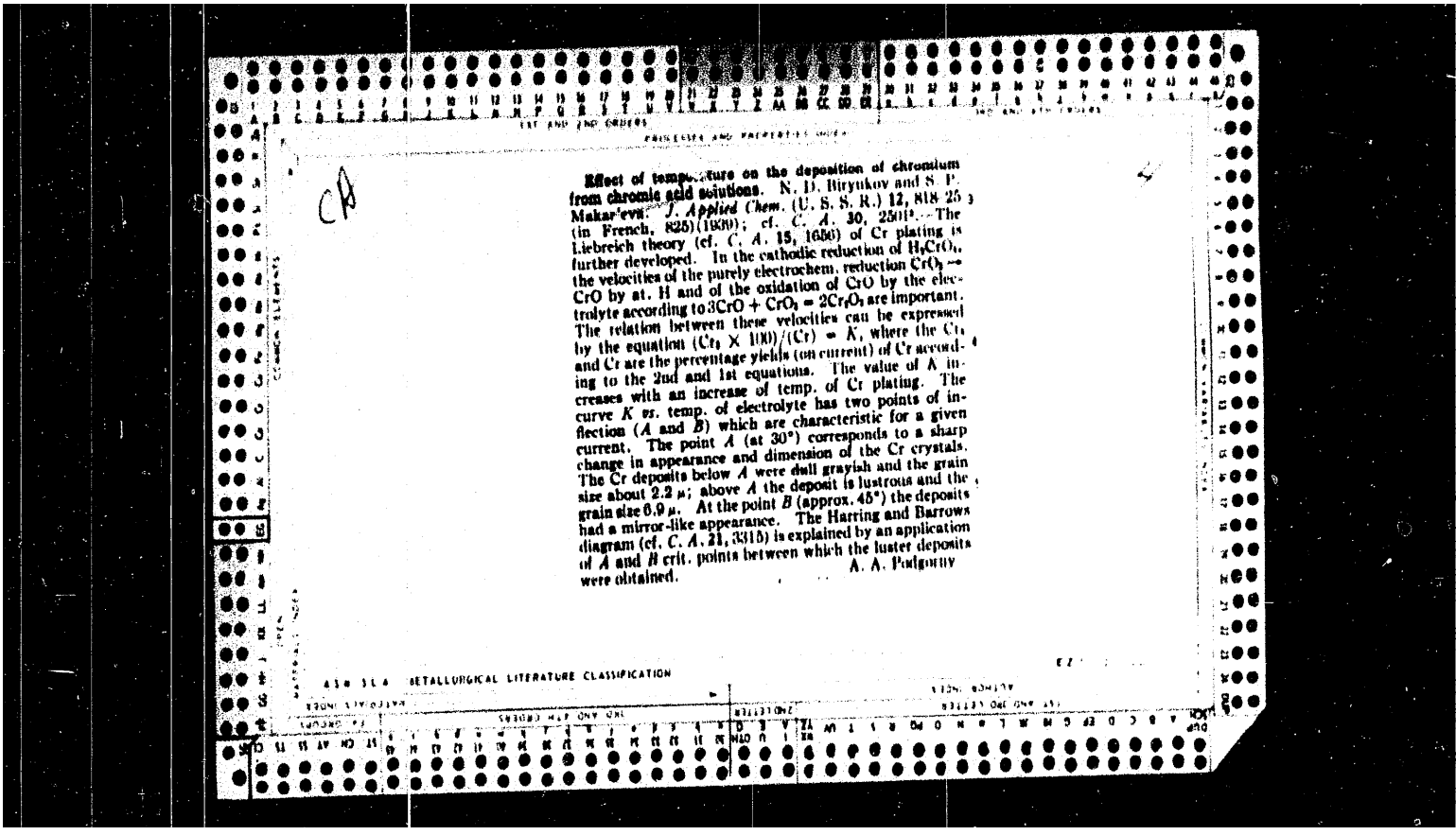
CA

4

Effect of trivalent chromium on the kinetics of chromium-plating. N. D. Biryukov, S. P. Makar'eva and N. D. Podobed. *Korroziya i Borba s Nei* 6, No. 2, 10–14 (1940); cf. *C. A.* **33**, 9151[3].—Two types of trivalent Cr compds. were studied (1) by introducing $Cr(OH)_3$ into the electrolyte and (2) by cathodic reduction of CrO_3. Results were quite different. Addn. of $Cr(OH)_3$ reduces the evolution of H and decreases the current yield of Cr. The cathodic reduction of CrO_3 to Cr^{III} increases the evolution of H, and decreases the rate of reaction at the anode. As the concn. of Cr^{III} increases, the current yield of Cr increases up to a certain max., and then decreases. For Cr^{III} from $Cr(OH)_3$, the rate of anodic oxidation is 4 to 5 times that of the Cr^{III} obtained by cathodic reduction of Cr^{VI}.

C. S. Shapiro

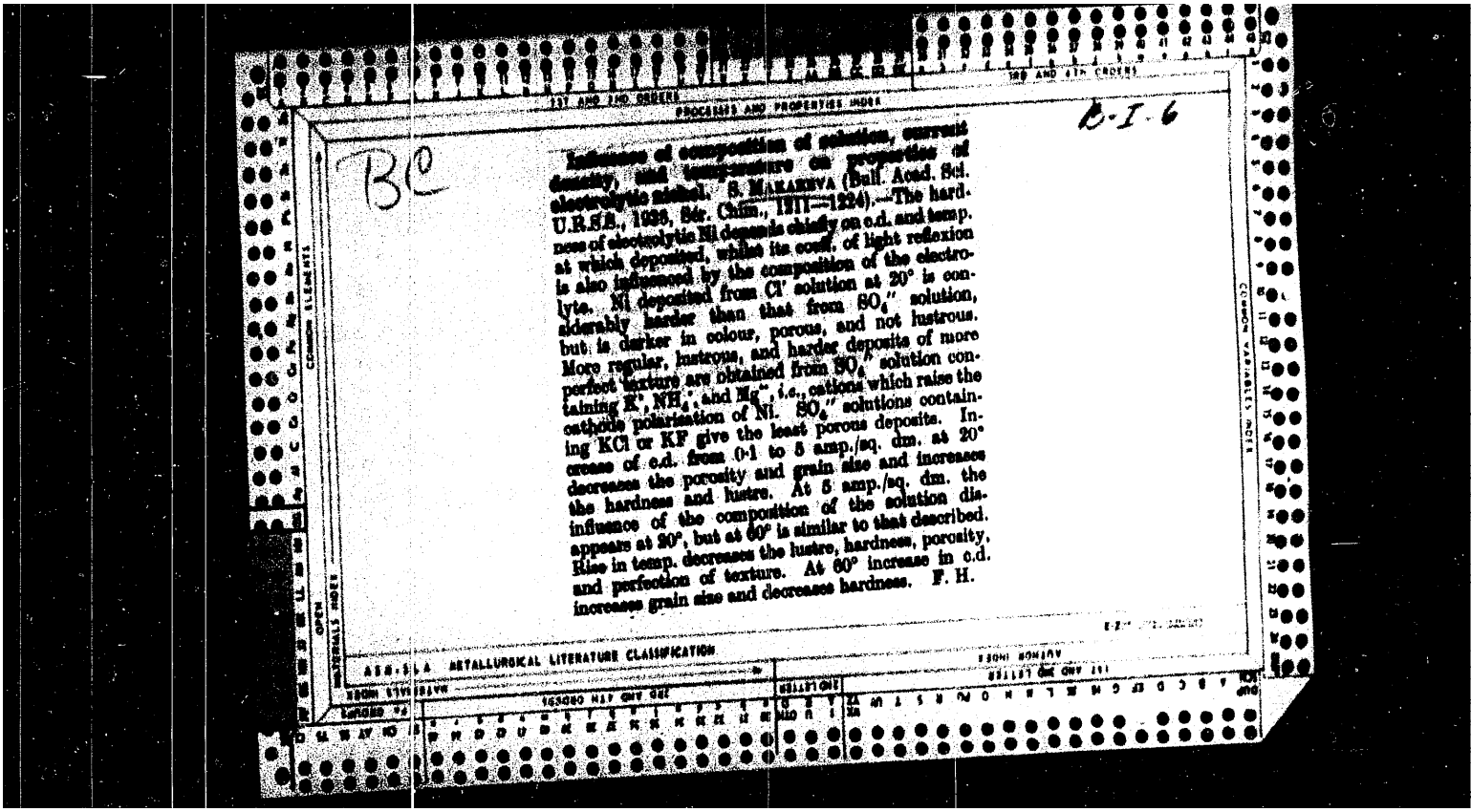
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

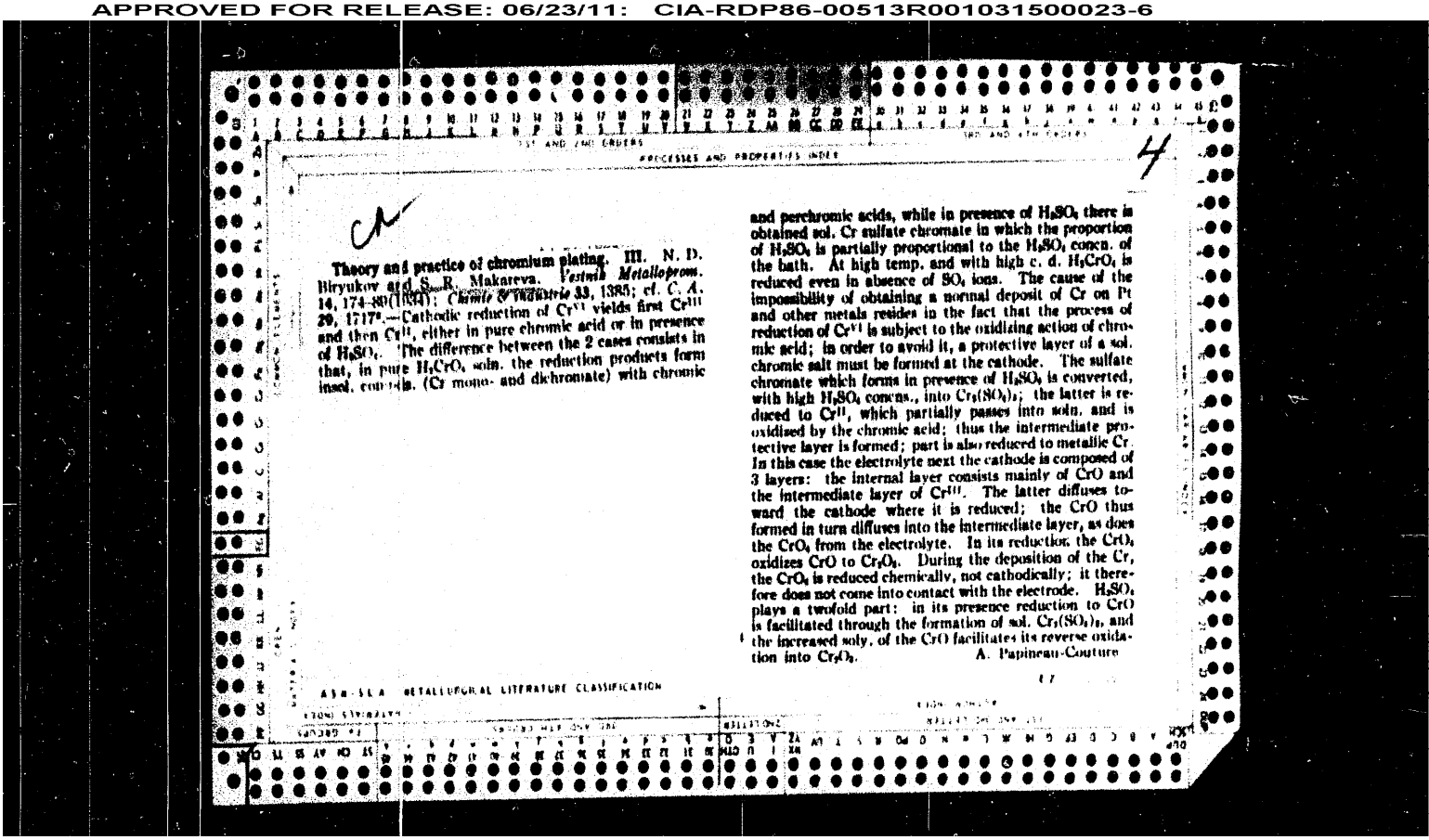


Effect of temperature on the deposition of chromium from chromic acid solutions. N. D. Biryukov and S. P. Makar'evn. *J. Applied Chem.* (U. S. S. R.) 12, 818-25 (in French, 825)(1939); cf. *C. A.* 30, 2501⁹.—The Liebreich theory (cf. *C. A.* 15, 1656) of Cr plating is further developed. In the cathodic reduction of H_2CrO_4, the velocities of the purely electrochem. reduction $CrO_3 \rightarrow CrO$ by at. H and of the oxidation of CrO by the electrolyte according to $3CrO + CrO_3 = 2Cr_2O_3$ are important. The relation between these velocities can be expressed by the equation $(Cr_1 \times 100)/(Cr) = K$, where the Cr_1 and Cr are the percentage yields (on current) of Cr according to the 2nd and 1st equations. The value of K increases with an increase of temp. of Cr plating. The curve *K* vs. temp. of electrolyte has two points of inflection (*A* and *B*) which are characteristic for a given current. The point *A* (at 30°) corresponds to a sharp change in appearance and dimension of the Cr crystals. The Cr deposits below *A* were dull grayish and the grain size about 2.2 μ; above *A* the deposit is lustrous and the grain size 6.9 μ. At the point *B* (approx. 45°) the deposits had a mirror-like appearance. The Harring and Barrows diagram (cf. *C. A.* 21, 3315) is explained by an application of *A* and *B* crit. points between which the luster deposits were obtained.

A. A. Padgorny

A 1 4 S L 4 METALLURGICAL LITERATURE CLASSIFICATION



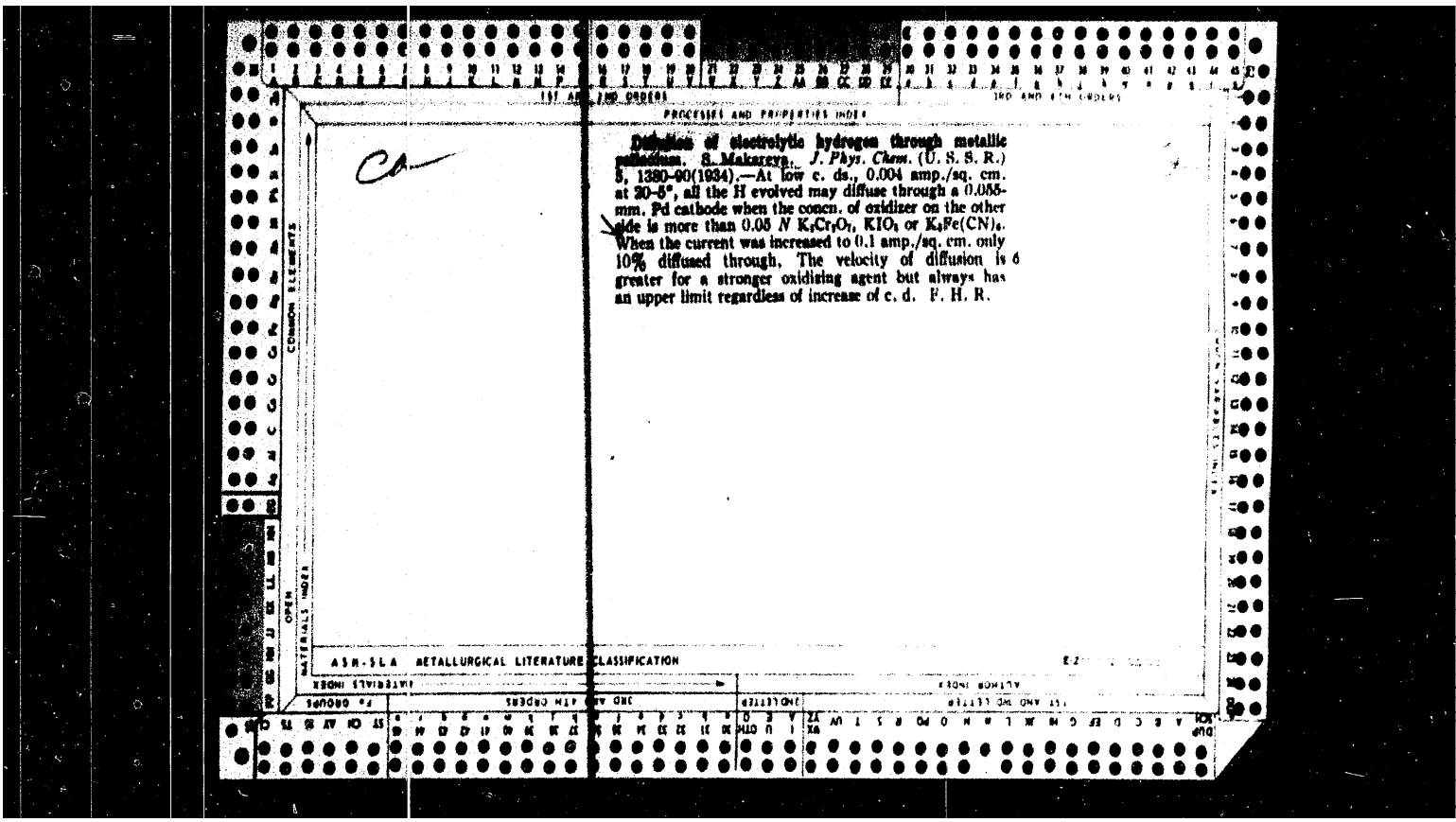


PROCESSES AND PROPERTIES INDEX

4

Theory and practice of chromium plating. III. N. D. Biryukov and S. R. Makareva. *Vestnik Metalloprom.* 14, 174-80(1934); *Chimie & Industrie* 33, 1385; cf. *C. A.* 29, 1717°.—Cathodic reduction of Cr^{VI} yields first Cr^{III} and then Cr^{II}, either in pure chromic acid or in presence of H_2SO_4. The difference between the 2 cases consists in that, in pure H_2CrO_4 soln. the reduction products form insol. compds. (Cr mono- and dichromate) with chromic and perchromic acids, while in presence of H_2SO_4 there is obtained sol. Cr sulfate chromate in which the proportion of H_2SO_4 is partially proportional to the H_2SO_4 concn. of the bath. At high temp. and with high c. d. H_2CrO_4 is reduced even in absence of SO_4 ions. The cause of the impossibility of obtaining a normal deposit of Cr on Pt and other metals resides in the fact that the process of reduction of Cr^{VI} is subject to the oxidizing action of chromic acid; in order to avoid it, a protective layer of a sol. chromic salt must be formed at the cathode. The sulfate chromate which forms in presence of H_2SO_4 is converted, with high H_2SO_4 concns., into $Cr_2(SO_4)_3$; the latter is reduced to Cr^{II}, which partially passes into soln. and is oxidised by the chromic acid; thus the intermediate protective layer is formed; part is also reduced to metallic Cr. In this case the electrolyte next the cathode is composed of 3 layers: the internal layer consists mainly of CrO and the intermediate layer of Cr^{III}. The latter diffuses toward the cathode where it is reduced; the CrO thus formed in turn diffuses into the intermediate layer, as does the CrO_4 from the electrolyte. In its reduction the CrO_4 oxidizes CrO to Cr_2O_3. During the deposition of the Cr, the CrO_4 is reduced chemically, not cathodically; it therefore does not come into contact with the electrode. H_2SO_4 plays a twofold part: in its presence reduction to CrO is facilitated through the formation of sol. $Cr_2(SO_4)_3$, and the increased soly. of the CrO facilitates its reverse oxidation into Cr_2O_3. A. Papineau-Couture

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

Diffusion of electrolytic hydrogen through metallic palladium. S. Makarova. *J. Phys. Chem.* (U. S. S. R.) 5, 1380-90(1934).—At low c. ds., 0.004 amp./sq. cm. at 20-5°, all the H evolved may diffuse through a 0.055-mm. Pd cathode when the concn. of oxidizer on the other side is more than 0.05 *N* $K_2Cr_2O_7$, KIO_3 or $K_4Fe(CN)_6$. When the current was increased to 0.1 amp./sq. cm. only 10% diffused through. The velocity of diffusion is 6 greater for a stronger oxidizing agent but always has an upper limit regardless of increase of c. d. F. H. R.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Photoreaction of carbon tetrachloride with dioxane. Zhur.ob.khim. 31. no.12:4057-4058 D '61. (MIRA 15:2)
(Carbon tetrachloride)
(Dioxane)

MAKAR'YEVA, A.G.; SKUL'SKAYA, R.V.

Mechanization of minor operations for cold gluing of shaped parts.
Der.prom.5 no.8:21 Ag '56. (MLRA 9:10)

1.Tallinskaya fanerno-mebel'naya fabrika.
(Talinn--Furniture industry) (Gluing)

MIKONI, V.V., inzh.; LELYAVINA, L.F., tekhnik; MAKAR'YEVA, A.A., tekhnik;
VERINA, G.P., tekhn.red.

[Catalog of standard-gauge swith boxes and crossings] Al'bom
tipovykh strelochnykh perevodov i peresechenii normal'noi kolei.
No.6 [Blind crossings made of rails of the R50 and R43 types]
Glukhie peresecheniia iz rel'sov tipov R50 i R43. Moskva, Gos.
transp. zhel-dor. izd-vo. 1958. 163 p. (MIRA 12:2)

1. Moscow. Gosudarstvennyy institut tekhniko-ekonomicheskikh
izyskaniy i proyektirovaniya zheleznodorozhnogo transporta.
2. Otdel tekhnicheskikh usloviy i norm Giprotranstei Ministerstva
putey soobshcheniya (for Mikoni, Lelyavina, Makar'yeva).
(Railroads--Switches)

MAKAR'YEVA, A. A.

MIKONI, V.V., inzhener; SAPRYGINA, G.M., inzhener; LELYAVINA, L.F., tekhnik; MAKAR'YEVA, A.A., tekhnik; VERINA, T.P. tekhnicheskiy redaktor.

[Album of switch boxes for normal gauge shuntings and crossings] Al'bum tipovykh strelochnykh perevodov i peresechenii normal'noi kolei. Moskva, Gos. transp. zhel-dor. izd-vo. Pt.2. [Ordinary switch boxes using type R50 rails with 1/11 and 1/9 frogs] Obyknovennye strelochnye perevody iz rel'sov tipa R50 s krestovinami marok 1/11 i 1/9. 1957. 172 p. (MLRA 10:6)

1. Moscow. Gosudarstvennyy institut tekhniko-ekonomicheskikh izyskaniy i proyektirovaniya zheleznodorozhnogo transporta. (Railroads--Switches)

MAKAR'YEV, Ye.I., inzh.

Experience in operating the Gorkiy locks. Rech.transp. 18 no.2:41-43 F '59. (MIRA 12:4)

1. Nachal'nik Gor'kovskogo shlyuza.
(Gorkiy hydroelectric power station)
(Locks (Hydraulic engineering))

MAKAR'YEV, V.V.; GALAKTIONOVA, Ye., red.; MESHCHERYAKOVA, V., tekhn.red.

[Plastics; collected texts in English] Plastmassy; sbornik tekstov na angliiskom iazyke. Podbor tekstov, kommentarii i slovar' V.V.Makar'eva. Moskva, Izd-vo lit-ry na inostr.iazykakh, 1960. 164 p. (MIRA 14:1)

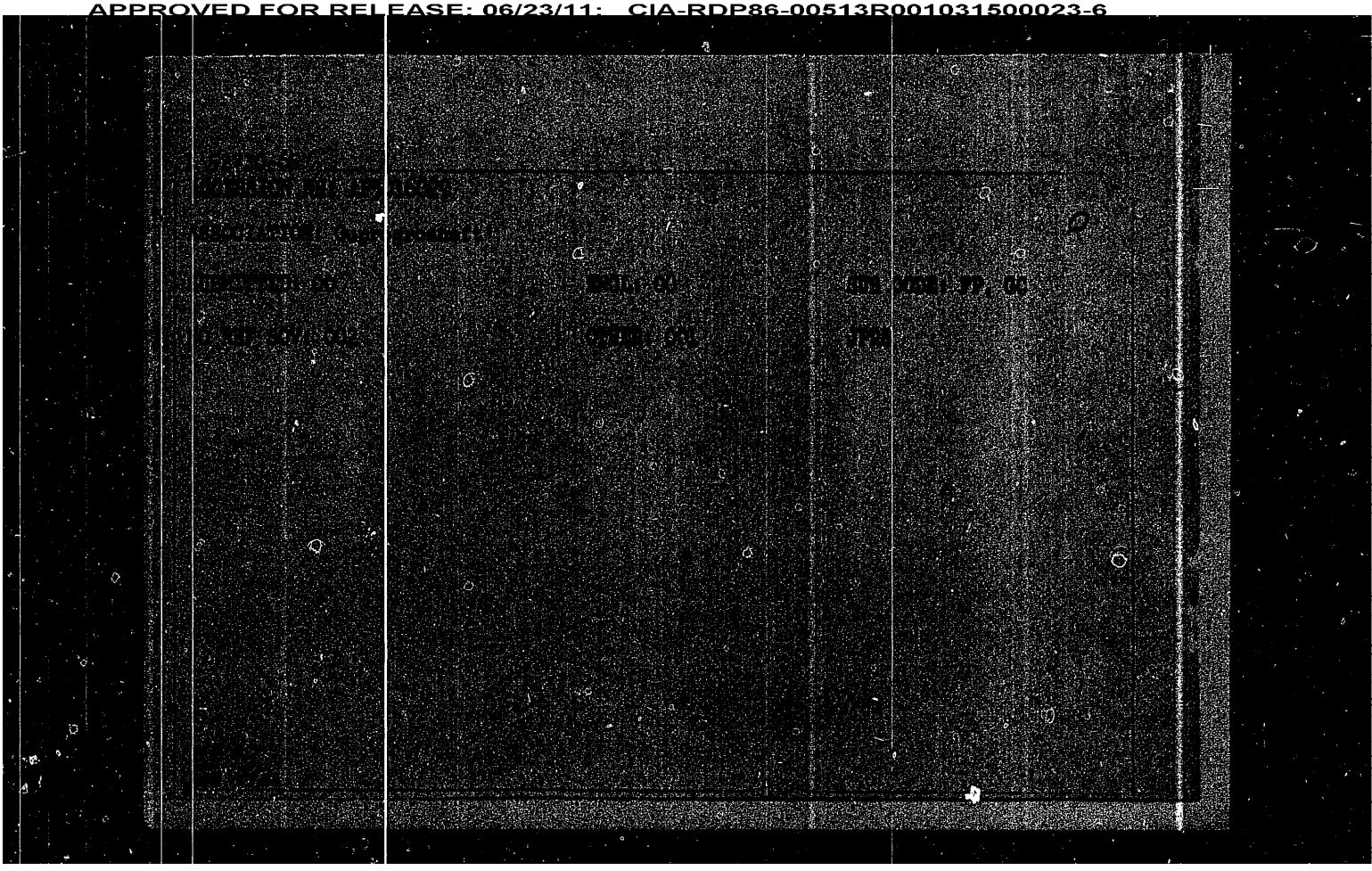
(Plastics)

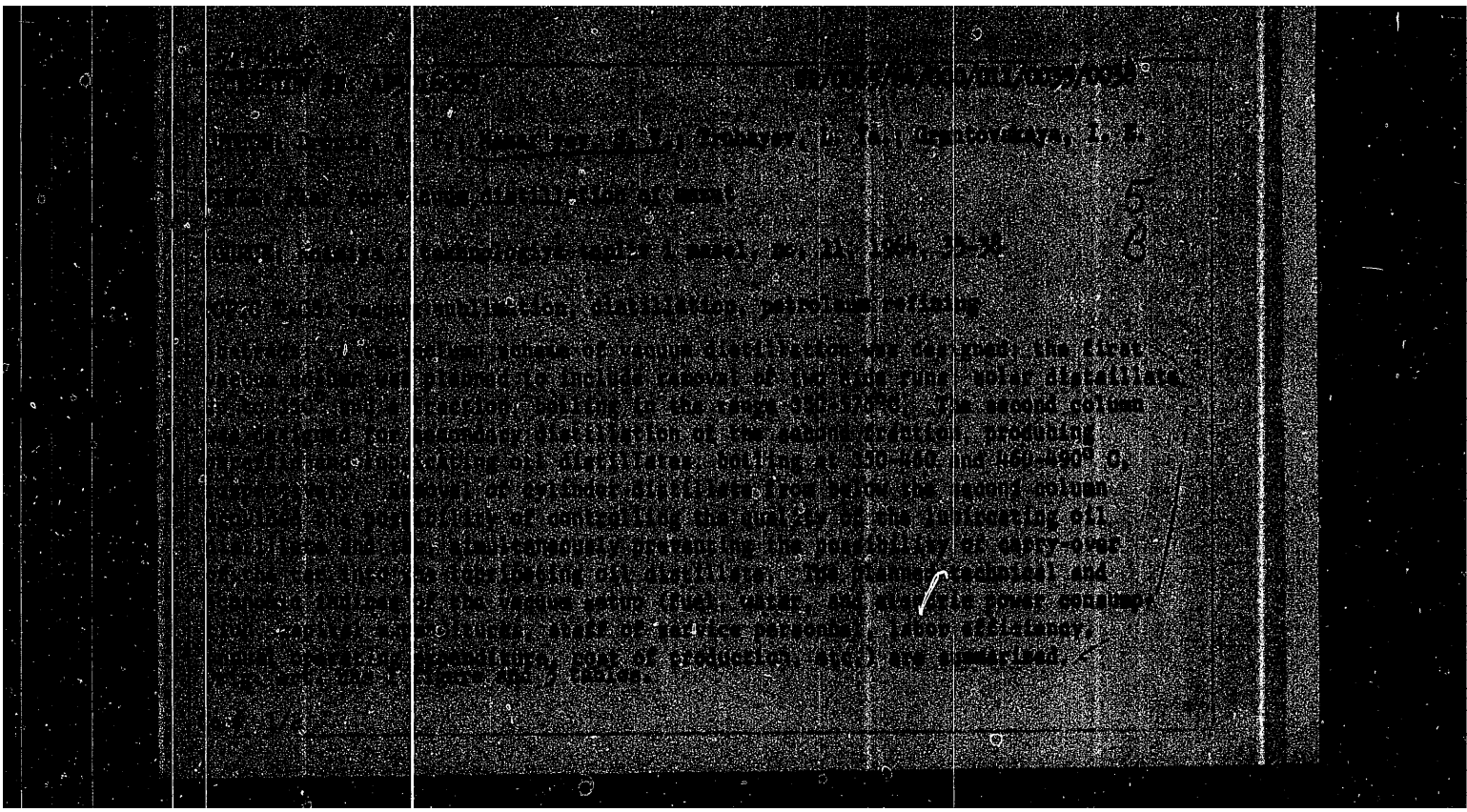
APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500023-6

DRONIN, A.P.; ZAMANOV, V.V.; KRICHKO, A.A.; LOZOVOY, A.V.; MAKAR'YEV, S.V.; MEZHLUMOVA, A.I.; PAL'CHIKOV, G.F.; STEPURO, S.I.

Combined arrangement for the use of thermal-cracking kerosine. Khim. i tekh. topl. i masel 9 no.6:18-24 Je'64 (MIRA 17:7)

1. Giprogrozneft' , Institut goryuchikh iskopayemykh AN SSSR i Grozneftekhimzavody.





KAZANSKIY, B.A.; DOROGOCHINSKIY, A.Z.; ROZENGART, M.I.; LYUTER, A.V.; MITROFANOV, M.G.; BRESHCHENKO, Ye.M.; KALITA, L.A.; GOL'DSHTEYN, Yu.A.; AFANAS'YEV, A.I.; MAKAR'YEV, S.V.; ZAMANOV, V.V.

Dehydrocyclization of normal hexane. Trudy GrozNII no. 15: 254-264 '63. (MIRA 16:5)

MITROFANOV, M.G.; MIRSKIY, Ya.V.; DOROGOCHINSKIY, A.Z.; DRONIN, A.P.
MAKAR'YEV, S.V.; LUGOVOY, B.I.

Selecting the best arrangement for separating gasoline fractions in molecular sieves. Trudy GrozNII no. 15:84-92 '63.
(MIRA 17:5)

MITROFANOV, M.G.; BONDARENKO, N.I.; MAKAR'YEV, S.V.

Technological process of dewaxing diesel fuels with crystal carbide. Trudy GrozNII no. 15:137-142 '63. (MIRA 17:5)

pressure in benzene column 0.1-0.3 kg/cm^2; temperature in benzene column, top 87 °C, bottom 130 °C; pressure in the recycle stock separation column 0.1-0.3 kg/cm^2; temperature in the recycle stock separation column, top 260°, bottom 304 °C; molar ratio hydrogen/feedstock 4:1; space velocity of feed 4.0 h^{-1}; consumption of hydrogen 2.1% wt of feedstock; yield of benzene 78.7% wt of toluene. It was calculated that high grade benzene produced by the process from petroleum derived toluene is considerably cheaper than that obtained currently in the coking industry. It was established that thermal demethylation of methyl naphthalenes (700 °C, 50 atm) gives naphthalene with a yield of ca.50% wt of feedstock after one cycle. The most suitable raw materials for the process are aromatic products obtained during reforming, pyrolysis and catalytic cracking processes. It is expected that the dealkylation process will constitute an important source of benzene and naphthalene for the Soviet petro-chemical industry.
There are 1 figure and 1 table.

Card 2/2

MAKAR'YEV, S.V.

5

S/065/62/000/004/001/004
E075/E136

AUTHORS: Gonikberg, M.G., Dorogochinskiy, A.Z., Mitrofanov, M.G., Gavrilova, A.Ye., Dronin, A.P., Kupriyanov, V.A., Makar'yev, S.V., Zamanov, V.V., and Vovk, L.M.

TITLE: A process of thermal dealkylation of aromatic hydrocarbons

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.4, 1962, 11-15

TEXT: As a result of investigations carried out in the years 1953-1960 in IOKh AN SSSR and GrozNII, a technological scheme was developed for an industrial process of thermal dealkylation of monocyclic aromatics such as toluene and methylnaphthalenes. A pilot plant for the process producing 30 000 tons of benzene per annum consists of a small number of simple units. It contains a tubular furnace of only 3 mil. cal/hour capacity. The main production indices for the plant are as follows: reactor pressure 50 atm; maximum temperature 790 °C; separator temperature 35 °C;

Card 1/2

and consumption figures listed on p 16. Large-scale automation will reduce the number of operators from 54 to 14. This scheme makes it possible to manufacture high quality motor fuels, to decrease the consumption of water, steam, fuel and power. From comparative data on the efficiency of the various plants (in table 2) it is obvious that the operation of combined plants will make it possible to lower capital expenditure by 35-40% and consumption of materials by 30-45%. There is 1 figure and 2 tables.

Combined Plant for the Processing of Petroleum

destructive distillation of goudron, the fractionation of gases with simultaneous stabilisation of petrol and the combined preparation of petrols and diesel fuels. The construction of the Giprogrozneft plant is described in detail (viz Fig). The vacuum distillate is led into the separator, after heating, and separated into the gaseous and liquid phase. The gas is used for further processing together with the catalytic cracking gas; the unstable gasoline is subjected to catalytic cracking; the fraction 195 to 380°C is mixed with the diesel fuel fraction obtained during catalytic cracking and this mixture is further processed; the fraction >380°C mixed with an analogous fraction from one of the columns, is used as a component for boiler fuels; the pitch from the evaporator DP is used either as a component of boiler fuels or utilised as raw material in coking plants. Two combined plants with an annual capacity of 3 million tons and 6 million tons of petroleum are to be based on these designs; the first plant to be used for the stabilisation of petroleum. The basic parameters of the plants are tabulated (table 1)

AUTHOR: Makar'yev, S.V. SOV/65-59-4-3/14

TITLE: Combined Plant for the Processing of Petroleum (Kombinirovannyye ustanovki dlya pererabotki nefti)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4, pp 12-18 (USSR)

ABSTRACT: According to plans outlined at the 21st Party Congress, the extraction of petroleum is to be increased to 230-240 million tons per year by 1965; this means an annual increase of 16-18 million tons and will require the erection of new refineries. The concept of combining various processes in one plant originated in 1931. The following processes are used in the USA, Canada and other countries of the West: atmospheric-vacuum distillation, catalytic cracking and catalytic polymerisation, alkylation, catalytic reforming, catalytic and chemical purification processes etc. In the USSR the Giprogrozneft', in collaboration with GrozNII, have worked on the design of combined plants for atmospheric-vacuum distillation of petroleum, catalytic cracking of vacuum distillates, the

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The Combination of Technological Processes and Installations in Oil Refining

penditures by 40% and the operation costs by 33%. The authors regard an increase in the capacity of the combined installation up to 6 million tons per year as possible.

S. Rozenoyer.

SOV/81-59-16-58493

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 16, p 409 (USSR)

AUTHORS: Strazh, A.G., Makar'yev, S.V.

TITLE: The Combination of Technological Processes and Installations in Oil Refining

PERIODICAL: Vestn. Sovnarkhoza Checheno-ingushetii, 1958, Nr 5, pp 8-11

ABSTRACT: Giprogrozneft' and GrozNII have designed a combined installation for the refining of 3 million tons of petroleum per year in which the processes of atmospheric petroleum distillation, the destructive distillation of mazut, the catalytic cracking of distillates and the head fractionation of gases are combined. For utilizing the heat obtained in the burning of coke in the regenerator of catalytic cracking, heating coils are installed through which petroleum is pumped. The heat of waste flows is also broadly used. According to the data of Giprogrozneft' the combination of the four processes in a single installation, as compared to four enlarged installations for the separate processes, reduces the capital ex-

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IVANOV, Anatoliy Vasil'yevich; FEDOROV, Lev Aleksandrovich; MAKAR'YEV, P.N., red.

[Control of the engineering state and use of construction equipment in the Main Administration of the Construction Industry in Leningrad] Kontrol' za tekhnicheskim sostoianiem i ispol'zovaniem stroitel'nykh mashin v Glavleningradstroe. Leningrad, 1964. 17 p. (MIRA 18:1)

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Utilize building machinery better. Mekh. stroi. 20 no.11:10-12 N '63.
(MIRA 17:1)

MAKAR'YEV, P.

New form for calculations of the work of construction equipment.
Na stroi.Ros. 3 no.9:6-7 S '62. (MIRA 15:12)

1. Glavnyy mekhanik Glavnogo stroitel'nogo upravleniya pri Ispolnitel'nom komitete Leningradskogo gorodskogo soveta deputatov trudyashchikhsya.
(Construction equipment)

MAKAR'YEV, P.N., inzh.

Over-all mechanization and automation at the construction site. Mekh.stroi. 18 no.9:9-12 S '61. (MIRA 14:10)

1. Glavnoye Leningradskoye upravleniye po zhilishchnomu i grazhdanskomu stroitel'stvu.
(Building machinery)

MAKAR'YEV, P.N., inzh.

Repair of building machines by the Main Leningrad Construction Trust.
Mekh. stroi. 18 no.4:25-26 Ap '61. (MIRA 14:6)

1. Glavleningradstroy.
(Leningrad--Building machinary--Repairing)

GORBACHEV, A.I., inzh.; MAKAR'YEV, P.N., inzh.; NEFED'YEV, P.I., inzh.

Modernization of the SBK-1 tower crane. Mekh. stroi. 17 no.6: 12-14 Je '60. (MIRA 13:6)
(Cranes, derricks, etc.)

MAKAR'YEV, P.N.; SIROTA, M.M.; VERESOV, V.Ya., inzh., nauchnyy red.; ROYTENBERG, A.S., red.izd-va; ROZOV, L.K., tekhn.red.

[What's new in the mechanization of construction] Novoe v mekhanizatsii stroitel'stva. Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 62 p. (MIRA 13:6)
(Building machinery)

MAKAR'YEV, P.G.

GERSHANOV, S.V.; MAKAR'YEV, P.G.; VOL'FOVSKAYA, V.N., redaktor; PETRUSHKO, Ye.I., tekhnicheskiy redaktor.

[Progressive practices in tractor repairing] Peredovoi opyt remonta traktorov. Moskva, Gos. izd-vo sel'skokhoz. lit-ry, 1954. 101 p. (MLRA 7:12)
(Tractors--Repairing)

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MAKAR'YEV, P., inzh.

Overall mechanization of housing construction. Na stroi. Ros. no.11:13-15 N '61. (MIRA 16:7)

1. Glavnoye Leningradskoye upravleniye po zhilishchnomu i grazhdanskomu stroitel'stvu.
(Construction equipment industry)

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Materials on the characteristics of a skin allergic test conducted with a Rickettsia prowazekii antigen. Trudy Len. inst. epid. i mikrobiol. 25:14-25 '63. (MIRA 17:1)

1. Iz otdela osobo opasnykh infektsiy Leningradskogo instituta epidemiologii i mikrobiologii imeni Pastera i Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

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SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

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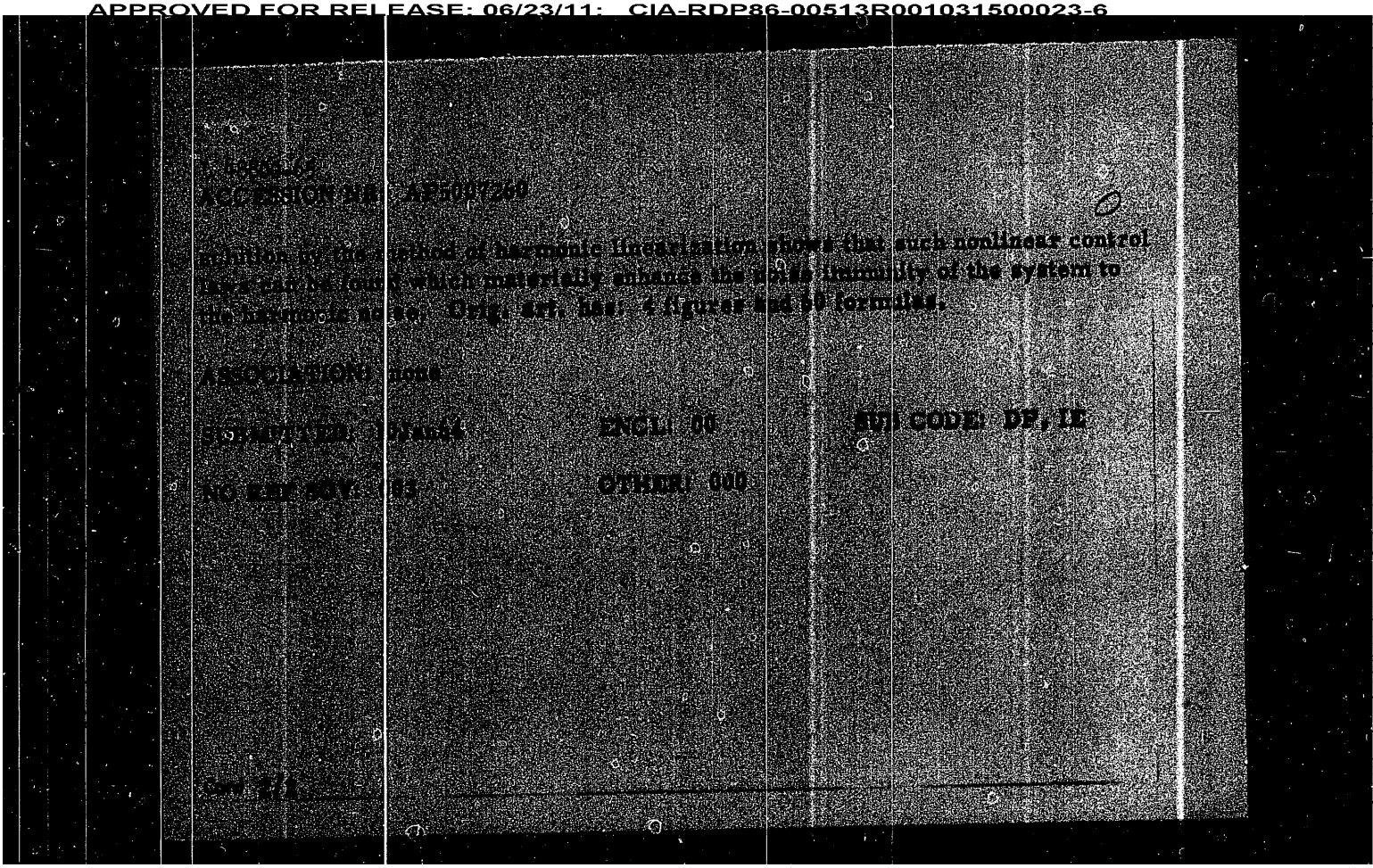

ACC NR: AP5007260

addition to the method of harmonic linearization shows that such nonlinear control laws can be found which materially enhance the noise immunity of the system to the harmonic action. Orig. art. has: 4 figures and 30 formulas.

ASSOCIATION: none

SUBMITTED: 17Aug64 ENCL: 00 SUB CODE: DP, IE

NO REF SOV: 03 OTHER: 000

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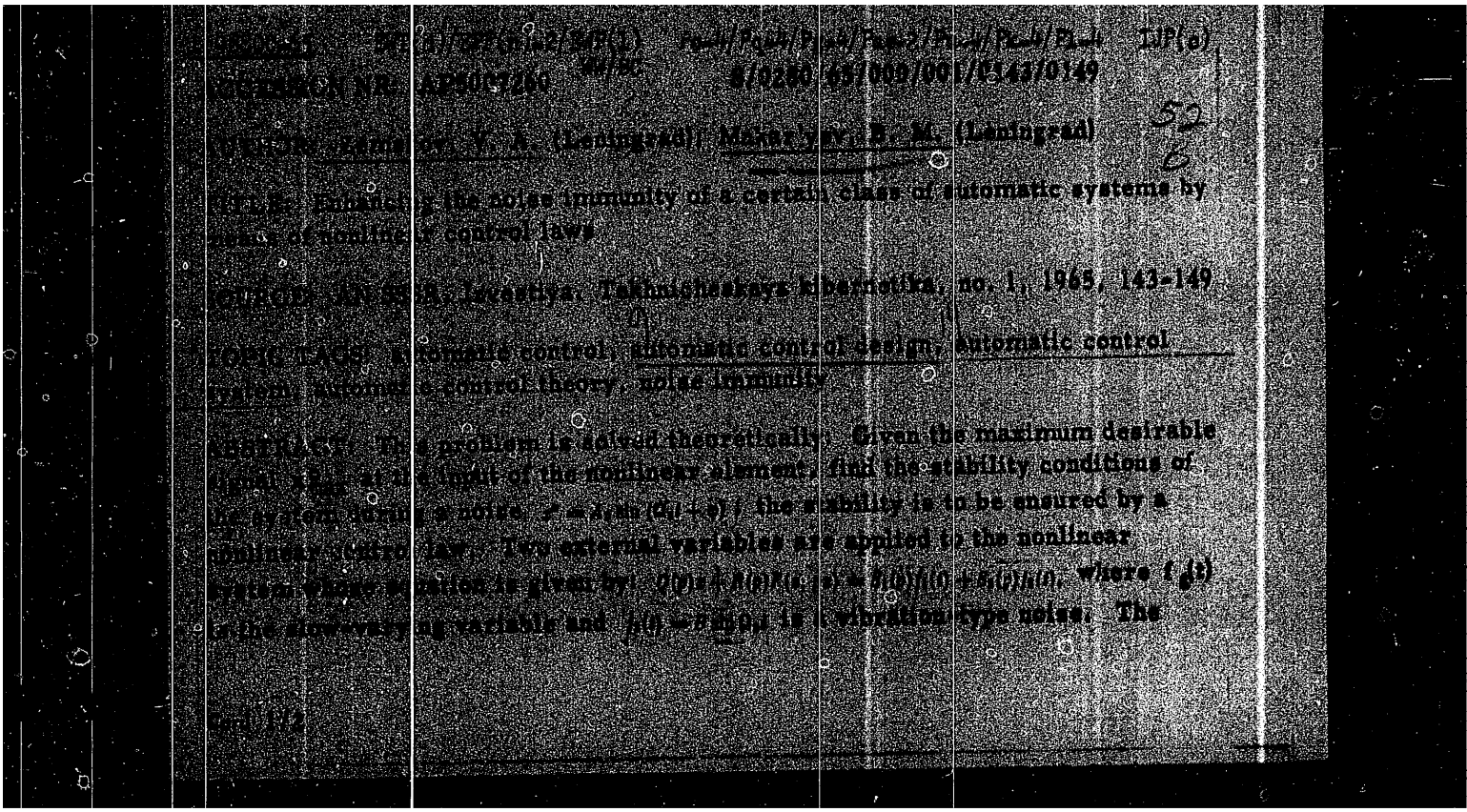

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